

2814  
#



Attorney Docket No. 0756-2450

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: ) Group Art Unit: 2814  
Hideomi SUZAWA et al. ) Examiner: D. Wille  
Serial No. 10/086,628 )  
Filed: March 4, 2002 )  
For: SEMICONDUCTOR DEVICE AND )  
MANUFACTURING METHOD )  
THEREOF )

INFORMATION DISCLOSURE STATEMENT

Honorable Commissioner of Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

In accordance with the provisions of 37 C.F.R. 1.56 and 37 C.F.R. 1.97-1.99, Applicant submits herewith a Form PTO-1449 listing references known to Applicant and requests that these references be made of record in the above identified application. Copies of the references listed are submitted herewith in accordance with 37 C.F.R. 1.98(a).

- U.S. Application Serial No. 09/566,730 is in the family of JP 2001-250953.
- U.S. Application Serial No. 09/566,722 is in the family of JP 2001-257359.
- U.S. Application Serial No. 09/566,723 is in the family of JP 2001-255560.
- U.S. Application Serial No. 09/566,729 is in the family of JP 2001-264804.
- U.S. Application Serial No. 09/566,742 is in the family of JP 2001-264807.
- U.S. Application Serial No. 09/566,733 is in the family of JP 2001-318626.

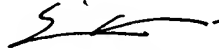
A check in the amount of \$180 is being submitted to comply with the provision of 37 C.F.R. § 1.97(c).

The Commissioner is hereby authorized to charge fees under 37 C.F.R. §§1.16, 1.17, 1.20(a), 1.20(b), 1.20(c), and 1.20(d) (except the Issue Fee) which may be

01/08/2004 SSANDAB 00000001 10086628 180.00 0P  
01 FC:1806

required now or hereafter, or credit any overpayment to Deposit Account No. 50-2280.  
A duplicate copy of this sheet is attached.

Respectfully submitted,



---

Eric J. Robinson  
Reg. No. 38,285

Robinson Intellectual Property Law Office, P.C.  
PMB 955  
21010 Southbank Street  
Potomac Falls, Virginia 20165  
(571) 434-6789

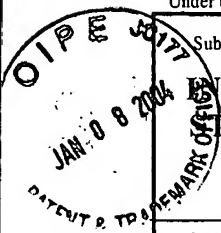
Please type a plus sign (+) inside this box → [ + ]

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form 1449A/PTO

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

## **Complete if Known**

Application Number	10/086,628
Filing Date	March 4, 2002
First Named Inventor	Hideomi SUZAWA et al.
Group Art Unit	2814
Examiner Name	D. Willie
Attorney Docket Number	0756-2450

Sheet 1 of 3

## **U.S. PATENT DOCUMENTS**

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
		4,624,737		Shimbo	11/25/1986	
		4,960,719		Tanaka et al.	10/02/1990	
		5,028,551		Dohjo et al.	07/02/1991	
		5,151,806		Kawamoto et al.	09/29/1992	
		5,261,156		Mase et al.	11/16/1993	
		5,362,660		Kwasnick et al.	11/08/1994	
		5,532,180		den Boer et al.	07/02/1996	
		5,539,219		den Boer et al.	07/23/1996	
		5,583,675		Yamada et al.	12/10/1996	
		5,668,379		Ono et al.	09/16/1997	
		5,668,651		Yamada et al.	09/16/1997	
		5,706,064		Fukunaga et al.	01/06/1998	
		5,739,880		Suzuki et al.	04/14/1998	
		5,757,453		Shin et al.	05/26/1998	
		5,757,456		Yamazaki et al.	05/26/1998	
		5,766,977		Yamazaki	06/16/1998	
		5,798,812		Nishiki et al.	08/25/1998	
		5,811,318		Kweon	09/22/1998	
		5,821,138		Yamazaki et al.	10/13/1998	
		5,825,449		Shin	10/20/1998	
		5,834,327		Yamazaki et al.	11/10/1998	
		5,847,687		Hirakata et al.	12/08/1998	
		5,867,233		Tanaka	02/02/1999	
		5,892,562		Yamazaki et al.	04/06/1999	
		5,917,564		Kim et al.	06/29/1999	
		5,917,567		Oh et al.	06/29/1999	
		5,959,599		Hirakata	09/28/1999	
		5,966,189		Matsuo	10/12/1999	
		5,977,562		Hirakata et al.	11/02/1999	
		5,986,724		Akiyama et al.	11/16/1999	
		5,990,998		Park et al.	11/23/1999	
		5,994,721		Zhong et al.	11/30/1999	
		5,995,190		Nagae et al.	11/30/1999	
		5,998,229		Lyu et al.	12/07/1999	
		6,008,869		Oana et al.	12/28/1999	
		6,025,892		Kawai et al.	02/15/2000	
		6,055,028		Nishi et al.	04/25/2000	
		6,064,456		Taniguchi et al.	05/16/2000	
		6,075,257		Song	06/13/2000	
		6,097,458		Tsuda et al.	08/01/2000	

Examiner Signature		Date Considered	
-----------------------	--	--------------------	--

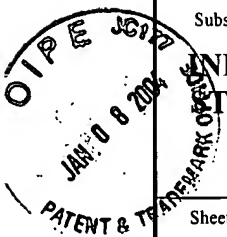
Please type a plus sign (+) inside this box → [+]

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form I449A/PTO

# **INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

## **Complete if Known**

Application Number	10/086,628
Filing Date	March 4, 2002
First Named Inventor	Hideomi SUZAWA et al.
Group Art Unit	2814
Examiner Name	D. Willie
Attorney Docket Number	0756-2450

Sheet

2

of

3

## **U.S. PATENT DOCUMENTS**

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
		6,097,465		Hiroki et al.	08/01/2000	
		6,114,184		Matsumoto et al.	09/05/2000	
		6,118,502		Yamazaki et al.	09/12/2000	
		6,124,606		den Boer et al.	09/26/2000	
		6,130,729		Oh et al.	10/10/2000	
		6,153,893		Inoue et al.	11/28/2000	
		6,160,600		Yamazaki et al.	12/12/2000	
		6,184,946		Ando et al.	02/06/2001	
		6,188,452		Kim et al.	02/13/2001	
		6,190,933		Shimabukuro et al.	02/20/2001	
		6,197,625		Choi	03/06/2001	
		6,208,390		Ejiri et al.	03/27/2001	
		6,208,395		Kanoh et al.	03/27/2001	
		6,218,221		Sah	04/17/2001	
		6,255,668		Kang et al.	07/03/2001	
		6,266,117		Yanagawa et al.	07/24/2001	
		6,266,121		Shigeta et al.	07/24/2001	
		6,271,903		Shin et al.	08/07/2001	
		6,304,243		Kondo et al.	10/16/2001	
		6,323,051		Shimada	11/27/2001	
		6,359,672		Gu et al.	03/19/2002	
		6,387,737		Yamazaki et al.	05/14/2002	
		2002/0145602		Matsueda	10/10/2002	
		2003/0058210		Yamazaki et al.	03/27/2003	

## **FOREIGN PATENT DOCUMENTS**

Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>4</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
		JP	05-323371			12/07/1993		AB
		JP	07-014880			01/17/1995		AB
		JP	09-015621			01/17/1997		FULL
		JP	09-054318			02/25/1997		FULL
		JP	09-152626			06/10/1997		FULL
		JP	11-109372			04/23/1999		AB
		JP	11-160734			06/18/1999		AB
		JP	11-202368			07/30/1999		AB
		JP	11-258596			09/24/1999		AB
		JP	2001-250953			09/14/2001		AB
		JP	2001-257359			09/21/2001		AB
		JP	2001-255560			09/21/2001		AB
		JP	2001-264807			09/26/2001		AB

Examiner  
Signature

Date  
Considered

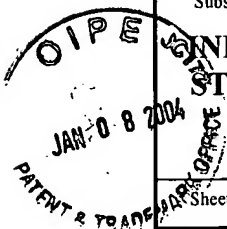
Please type a plus sign (+) inside this box → [+]

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form 1449A/PTO				<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (use as many sheets as necessary)				Application Number	10/086,628
				Filing Date	March 4, 2002
				First Named Inventor	Hideomi SUZAWA et al.
				Group Art Unit	2814
				Examiner Name	D. Willie
Sheet	3	of	3	Attorney Docket Number	0756-2450

FOREIGN PATENT DOCUMENTS								
Examiner Initials <sup>2</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
		JP	2001-264804			09/26/2001		AB
		JP	2001-318626			11/16/2001		AB

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
		Stanley Wolf et al., <i>Silicon Processing for the VLSI Era</i> , Volume 1: Process Technology, pp.161-175, 335.	
		OFR, specification, claims, abstract, and drawings of U.S. Serial No. 09/566,730 filed 05/09/2000 entitled "Semiconductor Device and Method of Fabricating the Same."	
		OFR, specification, claims, abstract, and drawings of U.S. Serial No. 09/566,733 filed 05/09/2000 entitled "Semiconductor Device and Manufacturing Method Thereof."	
		OFR, specification, claims, abstract, and drawings of U.S. Serial No. 09/566,729 filed 05/09/2000 entitled "Liquid Crystal Display Device and Method of Manufacturing the Same."	
		OFR, specification, claims, abstract, and drawings of U.S. Serial No. 09/566,742 filed 05/09/2000 entitled "Liquid Crystal Display Device and Manufacturing Method Thereof."	
		Pending claims, specification, claims, abstract and drawings of U.S. Serial No. 09/566,723 entitled "Semiconductor Device and a Method of Manufacturing the Same."	
		Pending claims, specification, claims, abstract, and drawings of U.S. Serial No. 09/566,722 entitled "Semiconductor Device and Manufacturing Method Thereof."	

Examiner Signature	Date Considered
-----------------------	--------------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

<sup>1</sup> Unique citation designation number. <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.